

## **XII. Removal Actions and the ARARs Process**

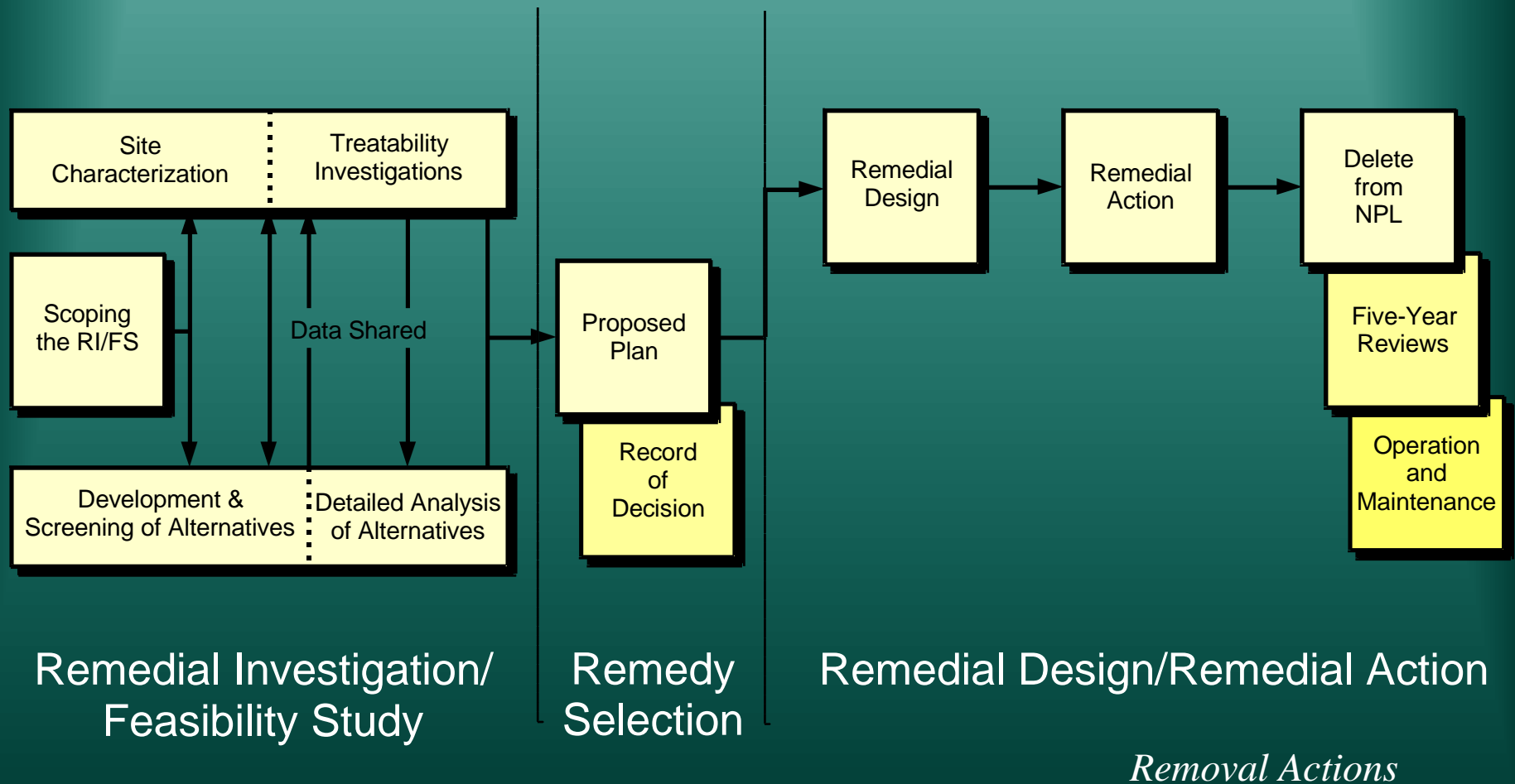
# Overview

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- Removal actions
- Attaining ARARs
- Emergency
- Time critical
- Non-time critical
- State ARARs

*Removal Actions*

# Remedial Action Process



# Removal Actions

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- A short-term process designed to mitigate or stabilize immediate threats
- Used to respond to releases or substantial threatened releases
- Must comply with ARARs to the extent “practicable”

# Attaining ARARs During Removal Actions

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- Must comply with ARARs to the extent “practicable”
- Considerations in determining whether an ARAR is “practicable” include
  - Urgency of the situation
  - Scope of the removal action to be conducted

# Types of Removal Actions

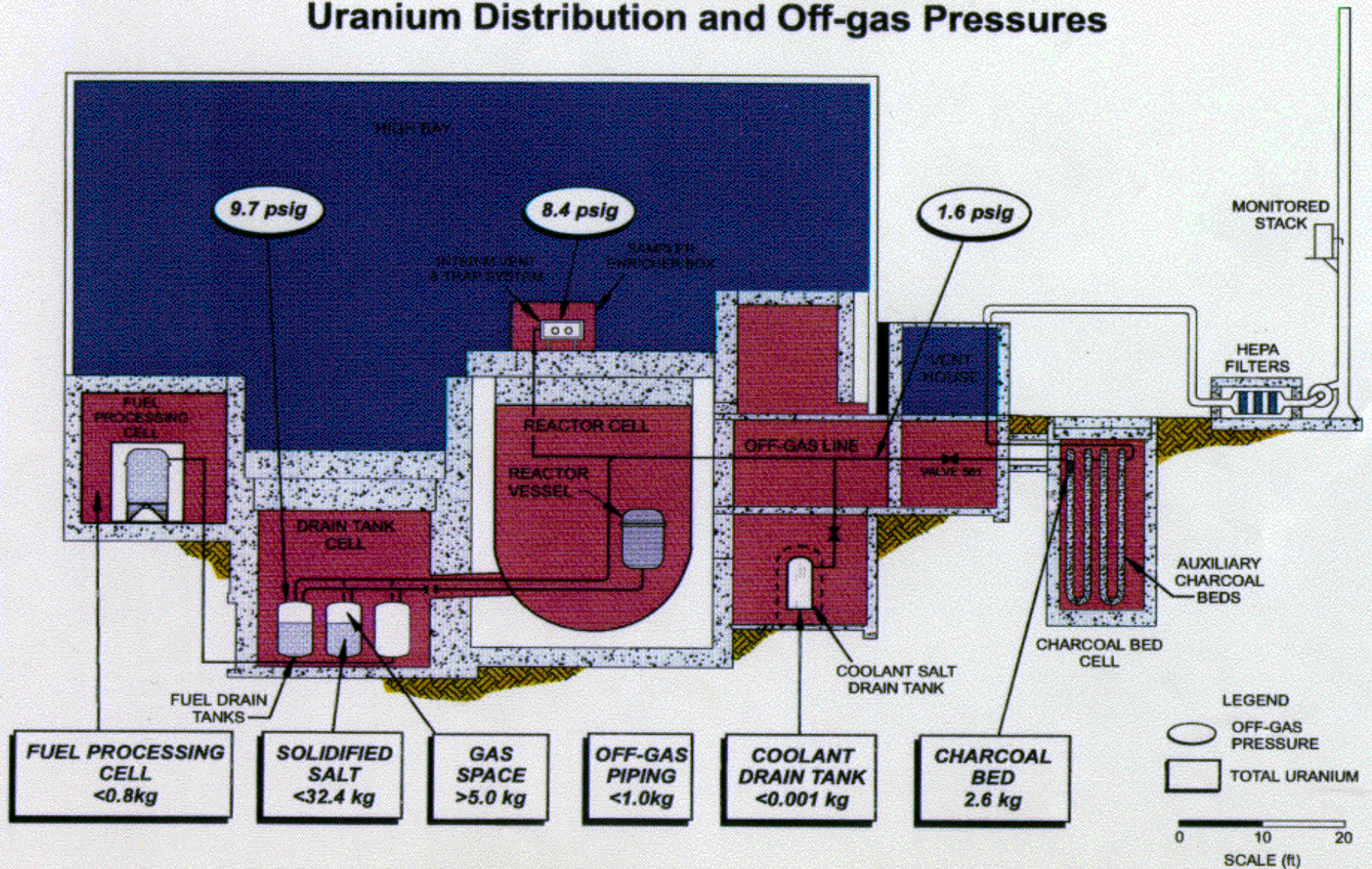
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- Removal actions can be divided into three categories:
  - ➡ Emergency (immediate)
  - ➡ Time-critical (less than 6 months)
  - ➡ Non-time-critical (greater than 6 months)



# Molten Salt Reactor Experiment Uranium Distribution and Off-gas Pressures

8/14/96



## Removal Actions

Example: MSRE TC & NTC removal action & interim remedial action





*Removal Actions*

Example: ORNL WAG 5 Seep C NTCR action





*Removal Actions*

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*Removal Actions*

Example: ORNL WAG 5 Seep C NTCR action



*Removal Actions*

Example: ORNL WAG 5 Seep D NTCR action





*Removal Actions*

Example: ORNL WAG 5 Seep D NTCR action



Example: ORNL WAG 5 Seep D NTCR action



*Removal Actions*

Example: ORNL WAG 5 Seep D NTCR action



*Removal Actions*

Example: ORNL WAG 5 Seep D NTCR action



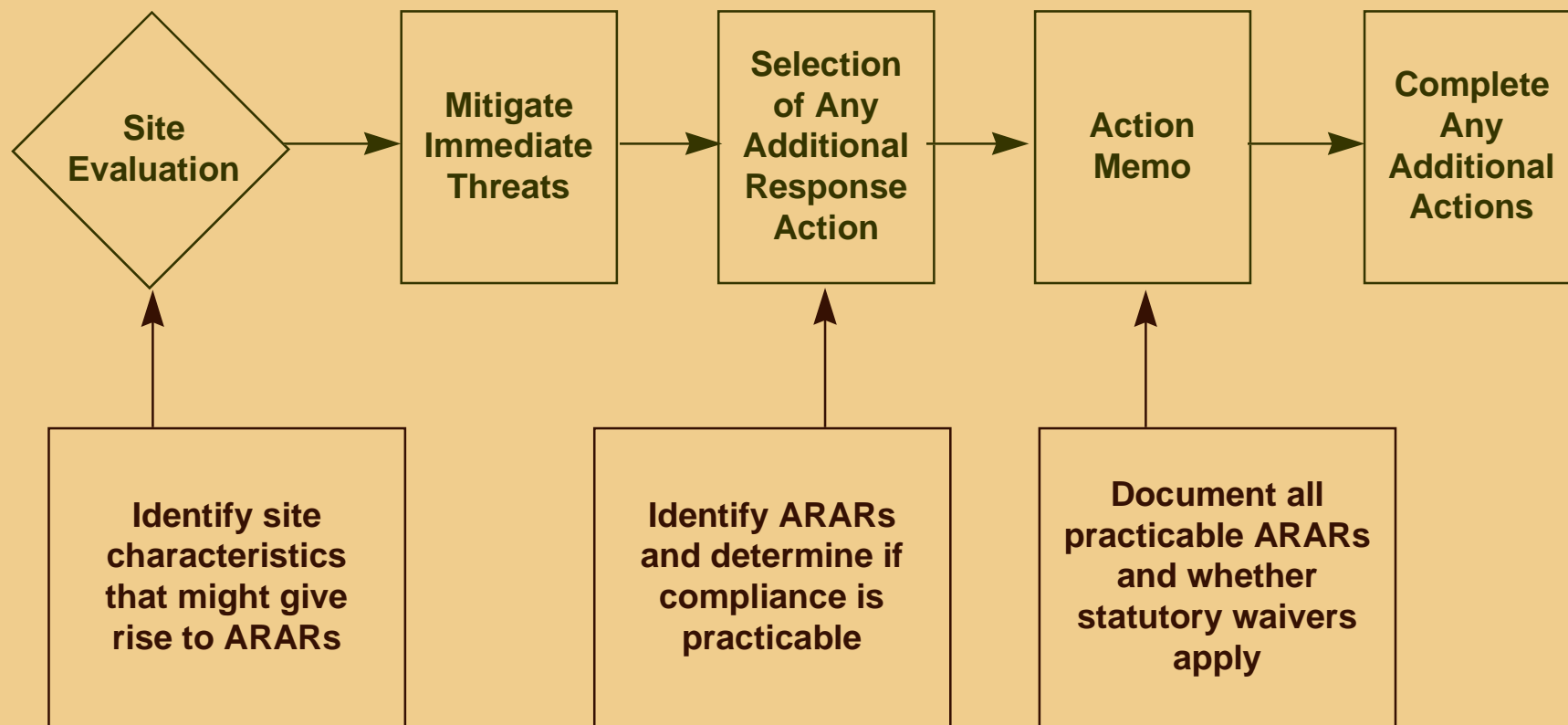


*Removal Actions*

Example: ORNL WAG 5 Seep D NTCR action



# Identification and Evaluation of ARARs During *Emergency* Removal Actions



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# Action Memorandum

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## Documenting ARARs

- Assure the public, state, and local agencies that ARARs were identified and met
- Make the public aware, in the administrative record, of all ARAR determinations
- Provide justification for actions taken at site

*Removal Actions*

# Contents of Action Memorandum

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- Purpose
- Site conditions and background
- Threats to public health or welfare and/or the environment\
- Proposed Actions and Estimated Costs
- Expected change - should action be delayed or not taken
- Outstanding policy issues
- Enforcement
- Recommendations

*Removal Actions*

# Contents of Action Memorandum (Continued)

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- List of federal ARARs
- An explanation, if necessary, of why federal ARARs were not considered before removal activities
- List of state ARARs
- An explanation, if necessary, of why state ARARs were not considered

*Removal Actions*



# Example of ARARs Documentation for Action Memorandum

## Proposed actions and Estimated Costs

### Compliance with Applicable or Relevant and Appropriate Requirements - Example Discussion

Potential federal ARARs for the removal action at the Pleasant Harbor Oil Recycling Company site in any state, U.S. were identified with the help of Region 11 representatives of the Office of Solid Waste, the Office of Water, the Office of Air Quality Planning and Standards, and the Office of Toxic Substances. The OSC communicated with these offices on February 12, 15, 16, and 17, 199x, respectively. Based on these communications, the following were identified as practicable federal ARARs for the site:

- RCRA Subtitle C (40 CFR 264 Subpart J) requirements for storage of a RCRA hazardous waste (KO52-Petroleum refining industry tank bottoms) in a tank with secondary containment
- TSCA requirements for storage of PCBs
- TSCA requirements to incinerate PCB-contaminated waste at a TSCA-permitted incinerator
- Clean Water ACT Section 404 requirements for dredging a federally designated wetland

The following administrative and substantive requirements were determined to be applicable to off-site actions:

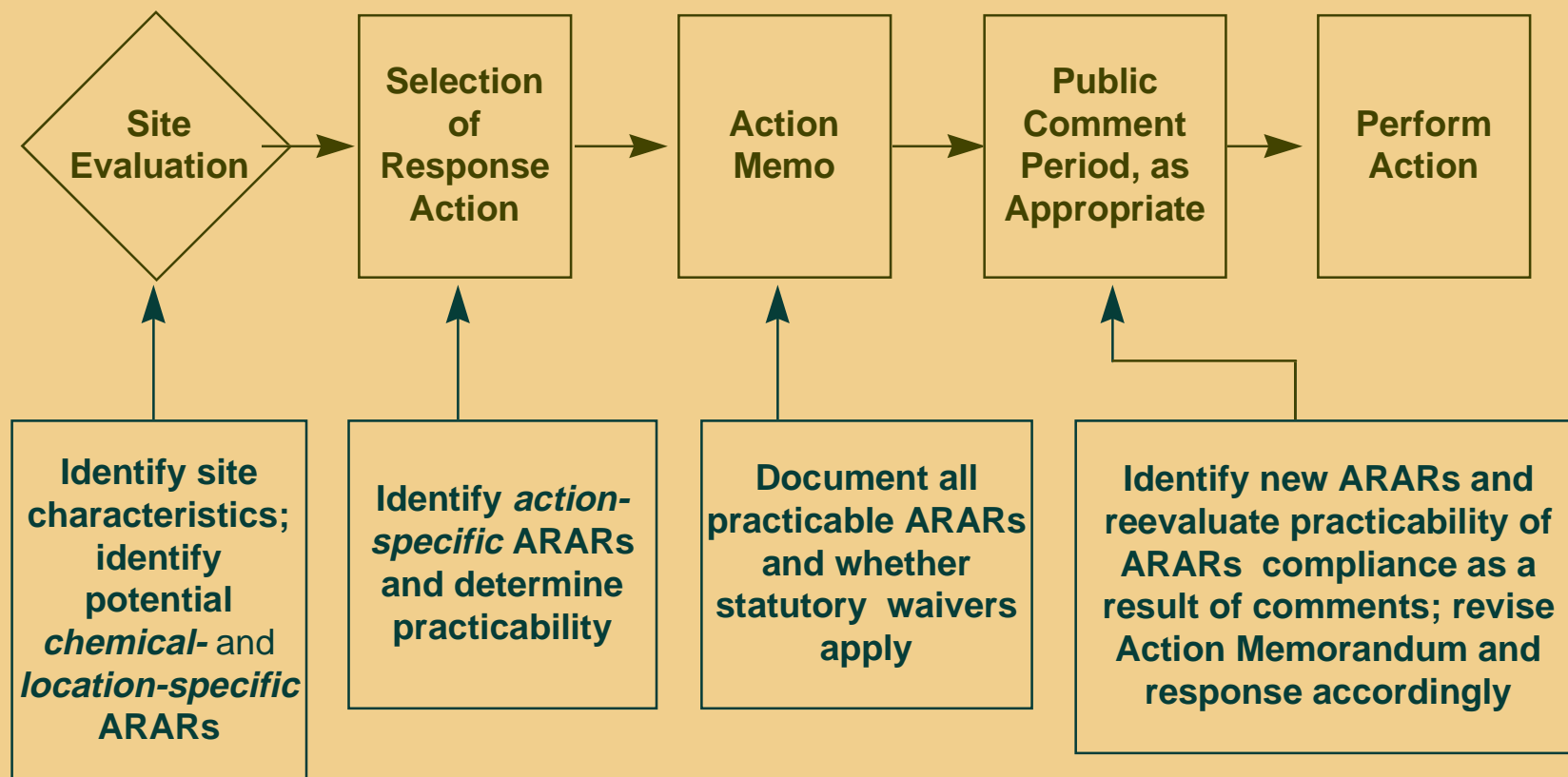
- RCRA and DOT requirements for transportation of a hazardous waste (manifest requirements, storage, and labeling of waste).

The following was identified as a requirement to be considered (TBC) for the site:

- TSCA PCB Spill Policy requirements for cleanup of PCB-contaminated soil in a residential area

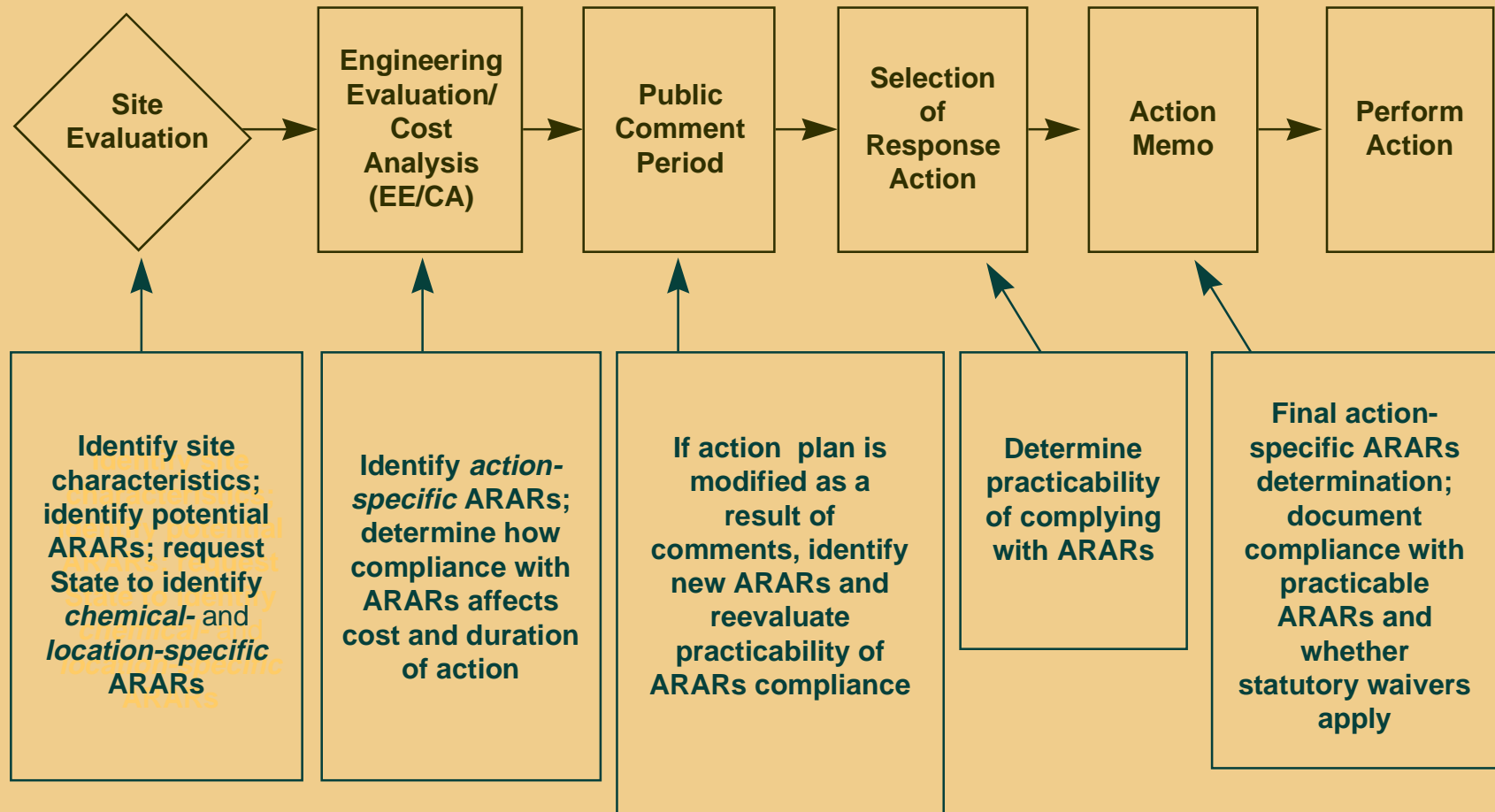
*Removal Actions*

# Identification and Evaluation of ARARs During *Time-Critical* Removal Actions



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# Identifying & Evaluating ARARs During *Non-Time-Critical* Removal Actions



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# Contents of an EE/CA

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- Executive Summary
- Site characterization
- Identification of removal action objectives
- Identification and analysis of removal action alternatives
- Comparative analysis of alternatives
- Recommended removal action alternative

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# EE/CA ARARs Documentation Example

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*Removal Actions*



# State ARARs

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- In order for state requirements to be ARARs, they must be:
  - ➡ Promulgated
  - ➡ More stringent than federal requirements
  - ➡ Identified in a timely manner

# Procedures for Identifying State ARARs

## **Removal Action Contemplated or Emergency Response Initiated**

Notify state representative of potential removal action and request initial identification of state



## **Written Request is Sent to State**

Send state a letter requesting a written list of potential ARARs; indicate when response is needed (this step may occur after mitigation of immediate threats in an emergency situation).



## **Site Conditions and Potential Actions Become Known**

Provide state with information on site location, site contaminants, contaminated media, threat, and potential removal actions as this information becomes known..



## **Potential State ARARs List is Received**

Determine which listed state requirements are actually ARARs for the site; determine whether compliance is practicable

# Summary

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- DOE will comply with ARARs to extent “practicable”
- ARARs are documented in an Action Memorandum
- An Action Memorandum is prepared for all types of removal actions
- An EE/CA is prepared for non-time critical removal actions

*Removal Actions*